Substitute Spec. Approved for Entry date

METHOD OF USING HOT AIR FOAM TO KILL VEGETATION

BACKGROUND OF THE INVENTION AND PRIOR ART

U.S Pat No 5,297,730 was issued to Thompson and Rajamannan for killing weeds using hot water and particularly disclosed spraying hot water and using blanket or apron to serve as a temporary insulation for the ambient temperature.

U.S Pat No 5,433,758 was subsequently issued to Thompson and Rajamannan as an improvement. It discloses using heated water to kill vegetation in combination with the use of a foam blanket, instead of a fixed canopy to insulate the vegetation for a second or more form ambient temperatures.

U.S Pat No 5,215,786 to Kittle uses foam as a form of insulation to protect plant matter in times of frost. Kittle also discloses heating this material to aid its cause. Our invention differs in that the foam will be heated to a degree that will kill the vegetation. We are not trying to protect weeds, but rather kill them.

U.S Pat No 3,713,404 to Lavo et al describes foam to which they add fertilizers, herbicides, fungicides, insecticides, sterilant, grass seed and mixtures thereof. Here they are entraining different materials in the foam and using the foam as a carrier of these specific materials.

U.S Pat No 5,319,878 to Moffet et al describes a method to kill fire ants below the ground with a heated gel·forming constituent. He is not using heated gel to kill weeds.

U.S Pat No 3,563,461 to Cole Jr. describes a foam distribution system that is permanently fixed in the ground close to crops to protect them from insects. In addition, this system can be used to feed fertilizer and if necessary, act as an insulator against frost. He does not claim that this system kills unwanted vegetation. Nowhere in this patent has Cole stated that he wanted to kill the trees and plants.

Had Cole raised the temperature of the foam to boiling point, he would have melted the cuticular wax of the leaf and dehydrated the plant to death. His system also differs from our invention in that Cole's in not mobile.

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